## New work order

Rich-world companies are being urged to move away from mass production and become "high-performance workplaces". Unfortunately, nobody can agree on what these things are, or how you create them

If THE second half of the 18th century saw the birth of the age of industry, then the second half of the 20th is bearing witness to the dawn of a less euphonious era: the age of the high-performance workplace. The idea has already spread rapidly, from manufacturing to services and from the private sector to the public. Bill Clinton and his labour secretary, Robert Reich, are doing their best to ensure that the idea spreads further still, peppering their speeches with the phrase and setting up a proselytising taskforce in the Labour Department.

As mass-production jobs migrate to developing countries, rich-world firms are being forced to compete on quality rather than price, variety rather than volume, after-sales service rather than quantity—and so on. The best way to achieve all these things, argue management theorists, is for firms to turn themselves into "high-performance workplaces". But what exactly are they? And are they really coming up with the goods? Thanks to a clutch of new books, including a study\* from America's Economic Policy Institute, answers to these questions are beginning to appear.

The basic aims of the high-performance workplace—to move away from mass production by improving efficiency and service—are broad enough for the phrase to mean different things to different managers around the world:

• The most familiar model is the Japanese one of lean production, spread by car makers like Toyota, which whittled down stocks and used teams of workers to eliminate bottlenecks, guarantee quality and institutionalise continuous improvement. The result was a dramatic fall in how long it took to make things.

• The (northern) Italians excel at "flexible specialisation"—using industrial networks to combine the virtues of small firms (timeliness, customisation) with the advantages of giant organisations (economies of scale, global reach). Benetton, a clothes firm, uses its fluid relationship with a myriad of suppliers, some specialising in design, others in manufacturing, to pander to the public's whims.

• The Germans specialise in "diversified quality"—producing short batches of luxury goods such as cars and machine tools. German managers insist that their traditional advantage in this area—their highly skilled workforce—is being reinforced by

## MANAGEMENT FOCUS

information technology, which is making it easier to combine the virtues of craft and mass production.

• The Swedish approach centres on autonomous teams of highly skilled craftsmen. In Volvo's much-discussed Uddevalla plant, for example, teams were responsible for assembling entire cars, and had direct contact with customers.

• The American approach aims to pick out the best from all of the above. It borrows quality circles from Japan, for exam-

Lean production teams
eliminate
bottle necks

ple, and apprenticeships from Germany. For all this eclecticism, however, two models are proving particularly popular in America: lean production and team production. The two models have a lot in common, notably an enthusiasm for sacking middle-managers and introducing computers. But they differ in the power they devolve to workers.

The lean-production model relies on centralised co-ordination and performance indicators. Marlow Industries, a Dallas-based manufacturer of thermoelectric coolers, has improved quality through extensive measurement of performance. At the moment, "lean" managers are obsessed with "re-engineering" their businesses in order to cut overheads and reduce cycle-times. The team model relies on workers to take decisions and produce innovations. At Corning's plant in Corning, New York, self-managing teams help to select new members.

Despite the recent burst of enthusiasm

\*"The New American Workplace". By Eileen Applebaum and Rosemary Batt. ILR Press

for "high performance" among management writers, many of the ideas are far from new. "Total quality management", which many people associate with Japan, was invented in the Bell Labs in the 1920s and became central to American war production. (The occupying Americans taught it to the Japanese in the 1940s, who then retaught it to their teachers in the 1970s.) In the 1950s, giants such as IBM and Procter & Gamble did their best to engage the interests of their employees. The trouble with such innovations is that, after a burst of enthusiasm, they fizzle out.

## Re-inventing the waffle

Is history repeating itself? Talk to managers in Europe and the United States and you will learn that they are all "re-inventing the workplace". Visit those workplaces, and you often find that the changes are marginal, introduced out of faddishness rather than conviction. Only a few, mainly largish firms, such as Levi Strauss and General Motors, have implemented lasting changes, and they have usually done so because of a crisis.

Even when they are introduced, highperformance workplaces do not always live up to the claims made on their behalf. Japanese-style lean production seems to have hit some sort of a buffer. In the 1970s the average number of man hours taken to make a car fell by 141 hours, from 279 to 138; in the 1980s it fell by only another six hours. Volvo was forced to close down its trend-setting Uddevalla plant in the spring of 1993, thanks to high costs.

Above all, management theorists should beware of underestimating the resilience of mass production. Even while they talk about creating high-quality jobs, many businessmen are revamping mass production, cutting labour costs, contracting-out, increasing flexibility by using part-time workers and using computers to "customise" products.

Indeed, many of the trendiest workplaces are old-fashioned factories in disguise. Italian clothes firms rely on cheap part-timers in southern Italy and Turkey. Nearly half of all workers in high-tech companies in Silicon Valley are unskilled or semi-skilled. The likes of Hitachi, Toshiba, NEC and Fujitsu are even trying to apply mass-production techniques to that quintessentially brainy activity, producing computer software. The high-performance workplace may sound good in academic seminars. To many managers, struggling to control costs and beat the competition, flexible mass production may sound even better.